

**POSITIONING AN ITEM IN THREE DIMENSIONS
VIA A GRAPHICAL REPRESENTATION**

ABSTRACT

- 5 A graphical representation representing at least a portion of an observable three-dimensional space is presented. A user can select a location on the graphical representation to direct a moveable item to a three-dimensional location within the space corresponding to the location selected by the user. Calibration operations can be performed, and error correction information can be generated to avoid
- 10 mechanical error. Manipulation devices using non-orthogonal coordinate systems can be supported. Multiple items can be positioned on a specimen viewed under a microscope, and an item such as an electrode can be positioned within a living biological specimen